LITTLE ROCK
Math / Grade 5 / Data Anaylsis Probability Assessment

Name _____

Teacher _____ Period _____

1. Mrs. Wood asked each student to write on a piece of paper one place that he or she would like to visit on a class field trip. The results are shown in the chart below:

Field Trip Choices

Place to Visit	Number of Student Choices
Science museum	9
Water park	3
Power plant	4
History museum	7
Zoo	5

Mrs. Wood placed each student's paper in a bag and drew one paper at random. What is the probability she drew a piece of paper that had the science museum written on it?

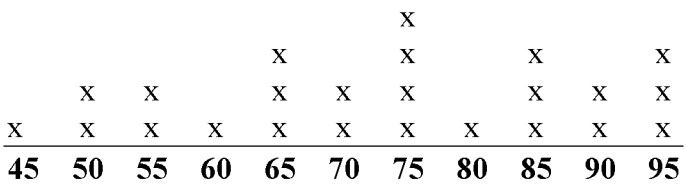
A. $\frac{1}{28}$

B. $\frac{1}{5}$

C. $\frac{9}{28}$

D. $\frac{9}{5}$

2. Carman made the following line plot. What is the mode of the data?



A. 65

B. 75

C. 95

D. 85

3. What is the range of the data shown below?

Food Item	Grams of Fat
Saltine cracker	1 gram
Slice of American cheese	4 grams
Slice of wheat bread	1.5 grams
Tablespoon of peanut butter	8 grams
Whole bagel	6 grams

A. 5 g

B. 7 g

C. 6 g

D. 4 g

A survey was taken from a sample of 5th grade students to determine how much weekly allowance they received.

Use the data below to answer question 4.

Student	Weekly Allowance
Abigail	$5
Barney	$15
Charles	$0
Donnetta	$10
Eduardo	$5
Frances	$15
Gina	$10
Hakeem	$20
Ivette	$5

4. What is the median of the data?

A. $5

B. $10

C. $15

D. $20

5. Allie surveyed some of her classmates to find out how many hours they spend watching television during the week. Her data is shown below. What is the average amount of time spent watching TV?

13	8	14	8	5	12

A. 12 hours

B. 11 hours

C. 10 hours

D. 8 hours

6. Justin is taking an aerobics class to improve his fitness level. During each class, the students count their heartbeats for a 10-second period. Justin's counts for his first 10 classes are shown below.

20 17 19 19 19 18 19 17 20 21

Which line plot is an accurate representation of this data?

A.

		x		
		x		
x		x		
x	x	x	x	x
20	17	19	18	21

B.

		x		
		x		
x		x	x	
x	x	x	x	x
17	18	19	20	21

C.

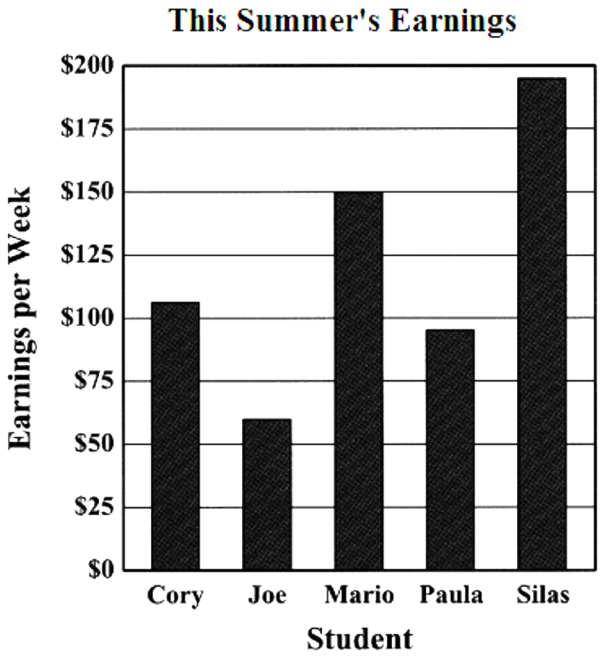
		x		
		x		
x		x	x	
x	x	x	x	x
16	17	18	19	20

D.

2	1	4	2
17	18	19	20

The graph below shows the amount of money earned per week by five students in their summer jobs.

Use the information below to answer question 7.



7. Silas earned $80 more per week last summer than he did this summer. How much could Silas' weekly earnings have been last summer?

A. $115

B. $250

C. $275

D. $290

8. Jeanna is measuring strawberry production for her science fair project. She recorded the number of strawberries produced in two different situations to determine which growing conditions were best. She recorded the results in the chart below.

Strawberry Production

Week	Strawberry Plants in Garden	Strawberry Plants in Greenhouse
1	3 strawberries	4 strawberries
2	6 strawberries	8 strawberries
3	9 strawberries	12 strawberries
4	12 strawberries	16 strawberries
5	15 strawberries	20 strawberries

Based on the data in the chart, what conclusion can be made?

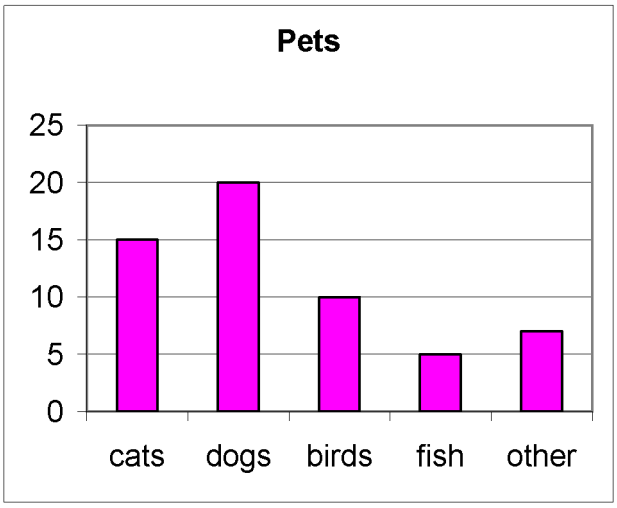
A. It rained most of the 5 week period.

B. Strawberries need a lot of attention to grow well.

C. Strawberries grown in the garden taste better than those grown in a greenhouse.

D. The conditions in the greenhouse were better for growing strawberries.

9. Stormi created the bar graph below.



Which survey question did she use?

A. Do you have a pet?

B. What is your favorite pet name?

C. What is your favorite pet?

D. What is your favorite wild animal?

Name _____

Teacher _____ Period _____

MATH OPEN-RESPONSE ITEM A

A. Josh purchased 4 shirts, 3 pairs of pants, and 2 ties that can be combined to create several new outfits.

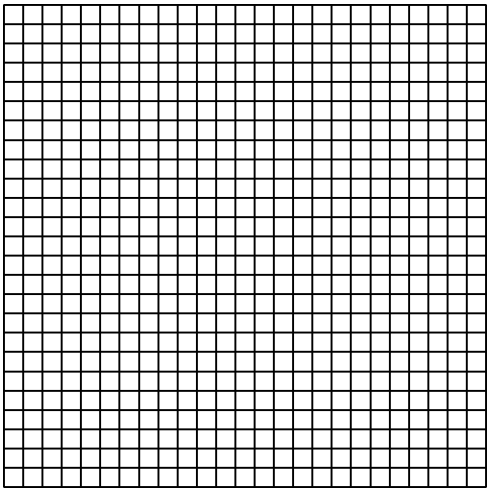
1. If an outfit consists of 1 shirt, 1 pair of pants, and 1 tie, how many **different** outfit combinations can Josh choose? Show all your work and/or explain your answer.
2. On the grid provided in your answer document, draw a tree diagram or make a list showing all of the **different** outfit combinations for Part 1.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

Name _____

Teacher _____ Period _____

A



MATH OPEN-RESPONSE ITEM A (DAP.17.5.2)

A. Josh purchased 4 shirts, 3 pairs of pants, and 2 ties that can be combined to create several new outfits.

1. If an outfit consists of 1 shirt, 1 pair of pants, and 1 tie, how many **different** outfit combinations can Josh choose? Show all your work and/or explain your answer.
2. On the grid provided in your answer document, draw a tree diagram or make a list showing all of the **different** outfit combinations for Part 1.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

RUBRIC FOR MATH OPEN-RESPONSE ITEM A (DAP.17.5.2)

Score	Description
4	The student earns 4 points. The response contains no incorrect work.
3	The student earns 3 points.
2	The student earns 2 points.
1	The student earns 1 point, or some minimal understanding shown.
0	The student earns 0 points. No understanding is shown.
B	Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" assigned for the item.)

Solution and Scoring

Part	Points
1	**2 points possible** 2 points: Correct and complete procedure showing and/or explaining how to determine the answer of 24 different outfit combinations OR 1 point: Correct answer with partial or vague work/explanation OR 1 point: Correct procedure with incorrect answer
2	**2 points possible** 2 points: Correct and complete tree diagram or list showing all possible combinations OR 1 point: Partially complete tree diagram or list showing nearly allpossible combinations OR 1 point: Complete/partial diagram showing possible combinations

LITTLE ROCK
Math / Grade 5 / Data Anaylsis Probability Assessment
Answer Key and Alignment

	Answer	Source	SLE	CC-Standard
1.	C	TLI	DAP.17.5.1	
2.	B	TLI	DAP.15.5.2a	
3.	B	TLI	DAP.15.5.2a	
4.	B	TLI	DAP.15.5.2a	
5.	C	TLI	DAP.15.5.2b	
6.	B	TLI	DAP.14.5.3a	
7.	C	TLI	DAP.14.5.3a	
8.	D	TLI	DAP.16.5.1	
9.	C	TLI	DAP.14.5.2	